SPECIFICATION AMENDMENTS

Please replace the paragraph beginning in line 26 of page 4 with the following amended paragraph:

The spindle motor ~~300~~ 106 is typically de-energized when the disc drive 100 is not in use for extended periods of time. The heads 118 are moved away from portions of the disk 108 containing data when the drive motor is de-energized. The heads 118 are secured over portions of the disk not containing data through the use of an actuator latch arrangement and/or ramp, which prevents inadvertent rotation of the actuator assembly 110 when the drive discs 108 are not spinning.

Please replace the paragraph beginning in line 1 of page 5 with the following amended paragraph:

A flex assembly 130 provides the requisite electrical connection paths for the actuator assembly 110 while allowing pivotal movement of the actuator assembly 110 during operation. The flex assembly 130 includes a printed circuit board 134 to which a flex cable 132 connected with the actuator assembly 100 and leading to the head 118 is connected[[;]] [[t]]The flex cable 132 ~~leading to the heads 118 being~~ may be routed along the actuator arms 114 and the flexures 116 to the heads 118. The printed circuit board ~~132~~ 134 typically includes circuitry for controlling the write currents applied to the heads 118 during a write operation and a preamplifier for amplifying read signals generated by the heads 118 during a read operation. The flex assembly 132 terminates at a flex bracket ~~134~~ 136 for communication through the base deck 102 to a disc drive printed circuit board (not shown) mounted to the bottom side of the disc drive 100.

Please replace the paragraph beginning in line 10 of page 5 with the following amended paragraph:

FIG. 2 is a control block diagram for ~~a~~ the disc drive 100 illustrating the primary functional components of ~~a~~ the disc drive 100 incorporating one of the various embodiments of the present invention and generally showing the main functional circuits which are resident on the disc drive printed circuit board and used to control the operation of the disc drive 100. The disc drive 100 is operably connected to a host computer 140 in a conventional manner. Control communication paths are provided between the host computer 140 and a disc drive microprocessor 142, the microprocessor 142 generally providing top level communication and control for the disc drive 100 in conjunction with programming for the microprocessor 142 stored in microprocessor memory (MEM) 143. The MEM 143 can include random

access memory (RAM), read only memory (ROM) and other sources of resident memory for the microprocessor 142.

Please replace the paragraph beginning in line 20 of page 5 with the following amended paragraph:

The discs 108 are rotated at a constant high speed by a spindle motor control circuit 148, which typically electrically commutates the spindle motor ~~300~~ 106 (FIG. 1) through the use, typically, of back electromotive force (BEMF) sensing. During a seek operation, wherein the actuator 110 moves the heads 118 between tracks, the position of the heads 118 is controlled through the application of current to the coil 126 of the voice coil motor 124. A servo control circuit 150 provides such control. During a seek operation the microprocessor 142 receives information regarding the velocity of the head 118, and uses that information in conjunction with a velocity profile stored in memory 143 to communicate with the servo control circuit 150, which will apply a controlled amount of current to the voice coil motor coil 126, thereby causing the actuator assembly 110 to be pivoted.

Please replace the paragraph beginning in line 28 of page 6 with the following amended paragraph:

In its most basic configuration, system 300 typically includes at least one processing unit 302 and memory 304. Depending on the exact configuration and type of computing device, memory 304 may be volatile (such as RAM), non-volatile (such as ROM, flash memory, etc.) or some combination of the two. This most basic configuration is illustrated in FIG. 3 by dashed line 306. Additionally, system 300 may also have additional features/functionality. For example, system 300 may also include additional storage (removable and/or non-removable) including, but not limited to, magnetic or optical disks or tape. Such additional storage is illustrated in FIG. 3 by removable storage 308 and non-removable storage 310. Computer storage media includes volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage of information such as computer readable instructions, data structures, program modules or other data. Memory 304, removable storage 308 and non-removable storage 310 are all examples of computer storage media. Computer storage media includes, but is not limited to, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium ~~which~~ that can be used

to store the desired information and ~~which~~ can be accessed by system 300. Any such computer storage media may be part of system 300.

Please replace the paragraph beginning in line 32 of page 7 with the following amended paragraph:

FIG. 4 is a flow chart illustrating modeling energy use based on power management timer settings according to one embodiment of the present invention. In this example, two power levels are assumed such as a standard operating level and an idle level in which portions of the device are de-energized. In such a case, there are three possible power states to consider, the first power level, the transition from the first power level to the second power level, and the second power level.

Please replace the paragraph beginning in line 28 of page 16 with the following amended paragraph:

FIG. 9 is a flowchart illustrating calculation of total throughput delay incurred by processing a series of tasks for power management timer settings according to the embodiment illustrated in FIG. 8. Here, operation begins with calculate operation 905. Calculate operation 905 comprises calculating the throughput for handling a task that arrives when the device is in a first power level such as a normal operating mode. Throughput in the first power level is simply the time required to handle a task in normal operating mode and may ~~me~~ be determined through testing during device development. Since the first power level is a base line, no delay calculation is required other than determining the baseline time. This time will be represented as t1.